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Factors related to choosing family medicine as future career among senior medical students. An experience of different universities in Saudi Arabia

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ABSTRACT

Background: Family medicine has various difficulties; most doctors who practice in other specialties presumably have no need for family medicine and find it irrelevant. This study aimed to explore the students' related factors in choosing family medicine as a future career. **Methodology:** During March to June 2022, an online-based survey was distributed to students among varieties of universities in Saudi Arabia. **Results:** Overall, 319 students were included in this survey. Most of them are from UQU, followed by TU and BU. Most students show interest in choosing family medicine. Simultaneously, students from UQU significantly showed no interest in choosing family medicine (P-value, <0.001). In contrast, students from TU and BU showed a significant association in interest in choosing family medicine (P-value, <0.001). **Conclusion:** The family medicine speciality provides medical practitioners with particular experience and these specialists have a significantly more significant opportunity to serve diverse populations. Family practitioners must be present in the healthcare system to provide comprehensive care services.

Keywords: Family Medicine, Future Career, Medical Students, Saudi Arabia

1. INTRODUCTION

Deciding a career prospect is a pivotal stage in any student's life because it will influence their personal growth and degree of happiness throughout their lives (Al-Thagafi and Zughbi, 2018; Ayuob et al., 2016). Family medicine (FM)

is a challenging specialty requiring considerable experience and expertise (Al-Thagafi and Zughbi, 2018; Tiemstra, 2004). Moreover, because family physicians examine everyone seeking aid, regardless of their characteristics (Al-Thagafi and Zughbi, 2018; Nesbitt, 2002; Mc-Gaha et al., 2007), family medicine is the cornerstone of the healthcare system (Al-Thagafi and Zughbi, 2018; Murtagh, 2011). Family medicine faces several challenges, including the concept of family medicine is still confusing and probably irrelevant to most physicians in other specialties; only a small number of family physicians are graduating; and family physicians working in the Ministry of Health face numerous issues related to a lack of staff, services and infrastructure (Al-Thagafi and Zughbi, 2018; WONCA, 1991).

Relevant personal, a passion for the discipline and practical familiarity with the subject all influenced the decision to pursue this specialization (Alshammari et al., 2019; Bien et al., 2019). A Canadian study found a distinction between the preclinical and clinical stages of medical school, with the clinical period having more positive variables than the preclinical stage (Alshammari et al., 2019; Scott et al., 2007). Furthermore, a local study conducted in 2014 revealed that Saudi medical students' future career choices were dependent on personal attributes and attitudes rather than clinical rotation experience (Alshammari et al., 2019; Alshahrani et al., 2014).

Several factors, including personal traits, educational environment and perceptions of professional practice, influence the limited appeal of family medicine to medical students (Al-Thagafi and Zughbi, 2018; Al-Salmani et al., 2020; Bakry et al., 2022). Therefore, we aimed to determine the influencing factors of choosing family medicine as a future career among senior medical students in different Saudis' Universities.

2. METHODOLOGY

Study design, sitting and participants

A descriptive multi-centre cross-sectional survey held at Umm Al-Qura University, Taif University and Al Baha University between March and June 2022. The Umm Al-Qura University ethics committee granted ethical approval. This survey followed the principles of the Declaration of Helsinki. We included only senior medical students, while joiner students and 4th and 5th-year students were excluded. Further, we excluded students from other universities and those who disagreed with participating in the survey.

Our sample size was determined utilizing Stat Calc of Open Epi software at the Rollin School of Public Health, Emory University, USA (Sullivan et al., 2009), taking into account a confidence interval of 95% and a 5% margin of error. A convenient sampling technique was used for sampling collection. However, considering the likelihood of non-response, we expanded our sample size to 350. Finally, 324 was the most recent info we have.

Ethical consideration

The article was approved by UQU's research ethics committee with IRB No (HAPO-02-K-012-2022-09-1184) in 24/9/2022. All procedures involving the use of human subjects in this study will adhere to the ethical standards established by the biomedical ethics committee of Umm Al-Qura University and the 1964 Helsinki declaration and its subsequent revisions.

Data collection

Data was gathered from March 2022 through June 2022. The self-managed, structured survey was delivered over various online social media platforms, including Facebook, Twitter, Instagram, Snapchat and WhatsApp. Online consent was required from participants to participate. The research team also responded to all participant queries and questions.

Statistical analysis

Microsoft Excel was used to extract and add the captured data to the spreadsheet. After being checked for accuracy and minor typographical issues, data were uploaded to a Statistical Package for the Social Studies 23 spreadsheet (IBM, Armonk, NY). A p-value of 0.05 or less was regarded as significant in descriptive analysis, expressed as percentages for categorical variables, mean standard deviation and mean for continuous variables. An independent Chi-square test was used to compare the categorical variables.

3. RESULTS

This survey explores students' related factors in choosing family medicine as a future career among different universities in Saudi Arabia. A total of 319 senior medical students were enrolled in this survey. Their mean age was 23.4 (SD=0.87). Most of the students were between 22-24-year-old (n=283, 88.7%), while males represented the majority of responding (n=220, 69%). Additionally,

students from Umm Al-Qura University show the majority of responses representing 49.5%, followed by Taif University and Al-Baha University (32% and 18.5%, respectively) (Table 1).

Table 1 Students' demographic profile

Variables	Categories	N.	%
Age groups	19-21	2	0.6%
	22-24	283	88.7%
	25-27	34	10.7%
Gender	Male	220	69.0%
	Female	99	31.0%
Marital status	Single	289	90.6%
	Married	30	9.4%
University	Umm Al-Qura University	158	49.5%
	Taif University	102	32.0%
	Al-Baha University	59	18.5%
Age (Mean) (standard deviation)	(Mean=23.4) (SD=0.87)		

Most students are interested in choosing family medicine as a future career ($n = 190$, 59.6%). Concurrently, most students had a relative or family member in family medicine ($n = 174$, 54.5%). Most students participated in voluntary and research work related to family medicine (69.3% and 61.4%, respectively) (Table 2).

Table 2 General responses to family medicine questions

Variables	Categories	N.	%
Interesting in choosing family medicine residency program	Yes	190	59.6%
	No	129	40.4%
Present of relative/friend in family medicine	Yes	174	54.5%
	No	145	45.5%
Contribution in voluntary work of family medicine	Yes	221	69.3%
	No	98	30.7%
Contribution in research work of family medicine	Yes	196	61.4%
	No	123	38.6%

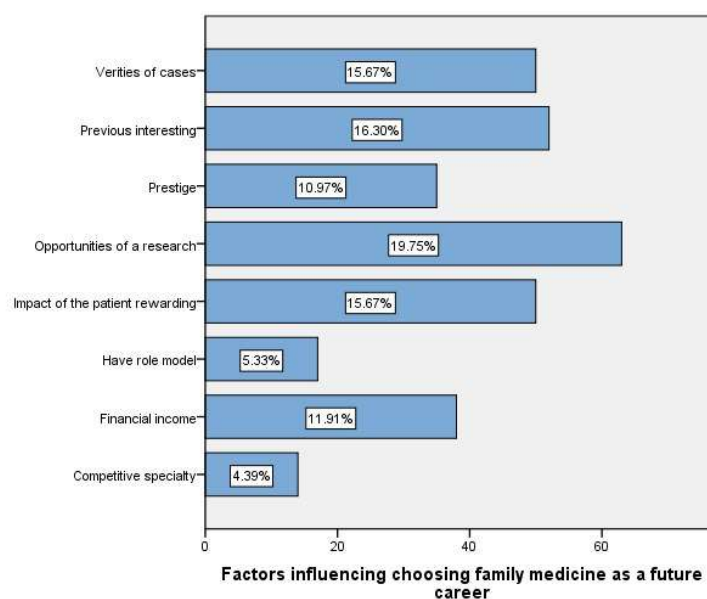


Figure 1 Factors attracting choosing family medicine

Interestingly, most students corresponded to “opportunities of research” as an influencing factor in choosing family medicine as a career. In contrast, most students corresponded to “other interests or passion” as deterring factors in selecting family medicine (19.75% and 29.78%, respectively) (Figures 1, 2).

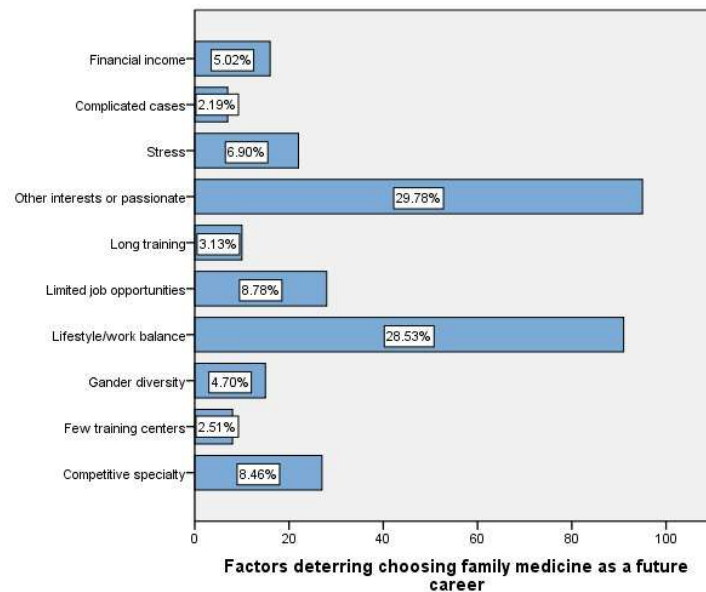


Figure 2 Factors deterring choosing family medicine

Students related attracting and deterring factors from choosing family medicine show no significant variation with students' Universities (P-value, 0.313 and 0.926, respectively) (Table 3).

Students' gender shows no significant association with students' interest in choosing family medicine (P-value, 0.137). Students from Umm Al-Qura University showed a significant association with no interest in choosing family medicine (n=93) (P-value, <0.001). In contrast, both Taif University and Al-Baha University students showed interest in choosing family medicine (n=90 and 35, respectively) (Table 4).

Table 3 The association between attracting/deterring factors of choosing family medicine as future career and students' university

Attracting factors	Students' university			p-value
	Umm Al-Qura University	Taif University	Al-Baha University	
Competitive specialty	8	3	3	0.313
Financial income	15	16	7	
Have role model	11	1	5	
Impact of the patient rewarding	24	16	10	
Opportunities of a research	27	28	8	
Prestige	16	12	7	
Previous interesting	29	12	11	
Verities of cases	28	14	8	
Deterring factors	Students' university			p-value
	Umm Al-Qura University	Taif University	Al-Baha University	
Competitive specialty	12	9	6	0.926
Few training centers	4	2	2	
Gander diversity	6	5	4	
Lifestyle/work balance	40	33	18	
Limited job opportunities	15	8	5	
Long training	5	4	1	
Other interests or passionate	49	27	19	

Stress	11	7	4	
Complicated cases	5	2	0	
Financial income	11	5	0	

Table 4 The association between participants' consideration of family medicine as future career and (gender and university)

Category		Consideration of family medicine as future career		p-value
		Yes (N.)	No (N.)	
Gender	Male	125	95	0.137
	Female	65	34	
University	Umm Al-Qura University	65	93	<0.001
	Taif University	90	12	
	Al-Baha University	35	24	

4. DISCUSSION

The decision to become a doctor is complicated and multifaceted (Ayuso-Raya et al., 2016; Lemire, 2013). However, three elements were found in an established conceptual perspective for medical students' speciality decision that was published some time ago: Factors related to students' traits, school type and students' impressions of the qualities of the medical speciality (Ayuso-Raya et al., 2016; Bland et al., 1995).

In Saudi Arabia, family medicine is among the most in-demand specialities. However, there is a proven global family physician deficit, which affects healthcare quality, the use of specialists inappropriately and the emphasis placed on prevention (Al-thagafi and Zughbi, 2018; Brotherton and Etzel, 2011).

Due to rising morbidity and mortality rates from curable diseases, family medicine has become increasingly important in Saudi Arabia. Thus, it is crucial to educate family medicine physicians to a high standard and to entice medical students to enter this vital field (Al-thagafi and Zughbi, 2018; Alyousefi, 2017). Accordingly, this study explores students' precipitating factors in choosing family medicine as a future speciality at different universities in Saudi Arabia.

Most students showed interest in choosing family medicine as a future career. In contrast to Al-thagafi and Zughbi, (2015), nearly one-third of the students expressed a desire to become family doctors in the future and slightly less than one-third said that family medicine would be their primary career choice. Many of the study participants (58%) chose family medicine as a speciality after gaining in-depth knowledge of the field, according to another study (Alyousefi, 2017).

Our participants reported that previous interest in family medicine contributed to choosing this speciality as a future career. This is substantially dissimilar from what is shown in Alyousefi, (2017), where observations of the doctor-patient relationship in this field, the attitudes, interests and compassion of the faculty staff and the satisfaction of the family medicine rotation was among the top reasons given by students for choosing family medicine.

However, particular research reveals disadvantages to pursuing family medicine. In the study by Al-thagafi and Zughbi, (2015), around two-thirds of students felt that family physicians are not highly respected in our society and the majority gave a neutral attitude regarding the suitability of the primary care course in medical school. Nevertheless, in the present study, we discovered that students who chose not to pursue family medicine had either a pastime or speciality.

Study limitation

Some possible limitations could be present, including selective bias; however, this was overcome with a substantial sample size during data collection—another limitation of study generalizability, in which further investigation will need among all universities in Saudi Arabia.

5. CONCLUSION

The survey results indicated that although family medicine is a challenging subject, it has a greater scope in medicine than other specialisations. Therefore, it's vital to encourage medical students to pursue jobs in family medicine, which encompasses a broader range of specialities. Furthermore, the study findings suggest that most participants are interested in choosing family medicine as a future career.

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Conflict of interest

The authors declare that there is no conflict of interests.

Data and materials availability

All data sets collected during this study are available upon reasonable request from the corresponding author.

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